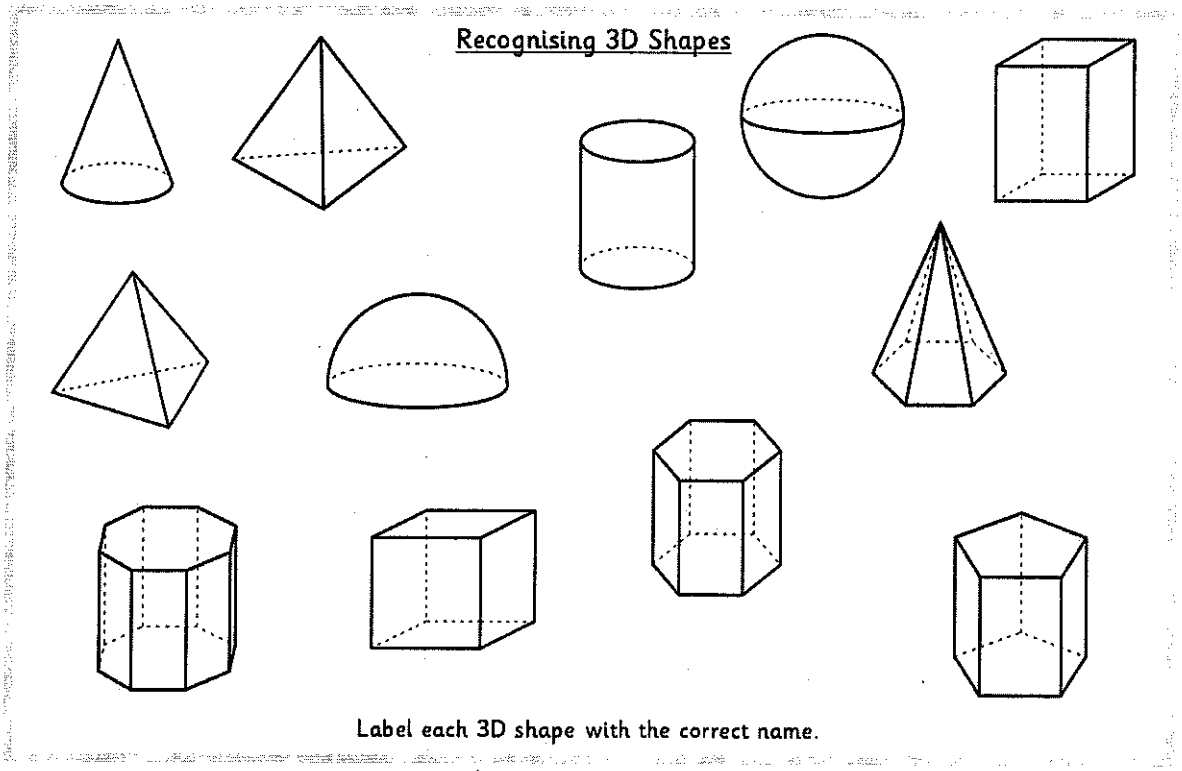
Introduction to Math 1
Unit 4 Agenda

Name_____

	UNIT 4: 3D Figures and Geometry	Assignment
5/7 Mon	Volume and Surface Area Flipbook and Models	
5/8 Tues	Volume of Prisms and Cylinders Page 1-3	
5/9 Wed	Volume of Pyramids and Cones Pages 4-5	
5/10 Thurs	Surface Area of Prisms and Cylinders Pages 6-7	
5/11 Fri	Surface Area of Pyramids and Cones Pages 8-9	
5/14 Mon	Spheres and Hemispheres Pages 10-11	
5/15 Tues	Review	
5/16 Wed	Test/Project	
5/10 Thurs	Project	
5/11 Fri	Project Due	



NAME _____ DATE _____

Practice

Student Edition
Pages 607–613

Volume of Prisms and Cylinders

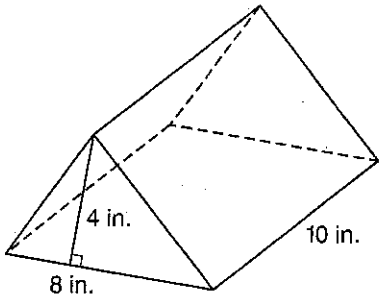
Find each of the following. Round to the nearest tenth.

1. the volume of a right prism whose square base has sides of 4 feet and whose height is 9 feet

2. the volume of a cylinder with a height of 2 meters and a radius of 0.5 meters

Find the volume of each solid. Round to the nearest tenth.

3.



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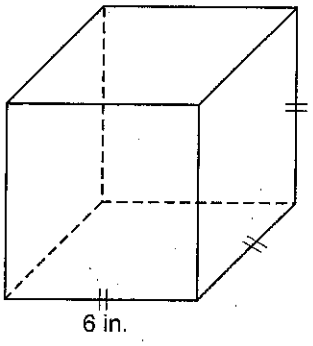

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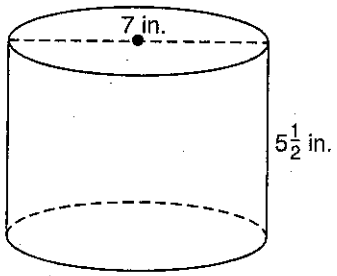

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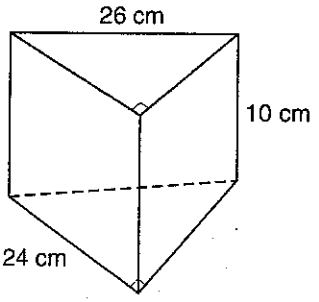

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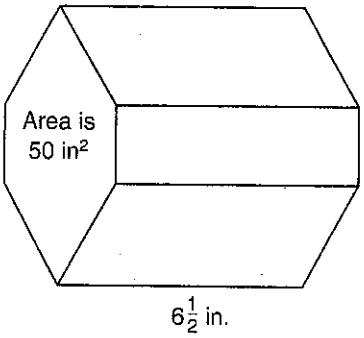

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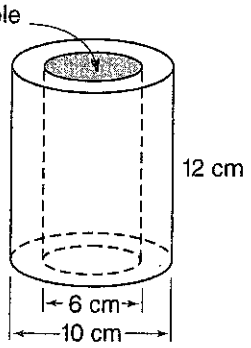
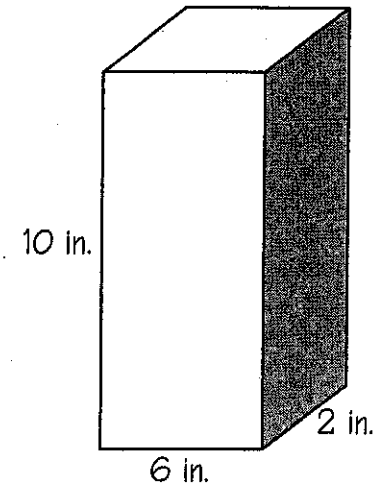
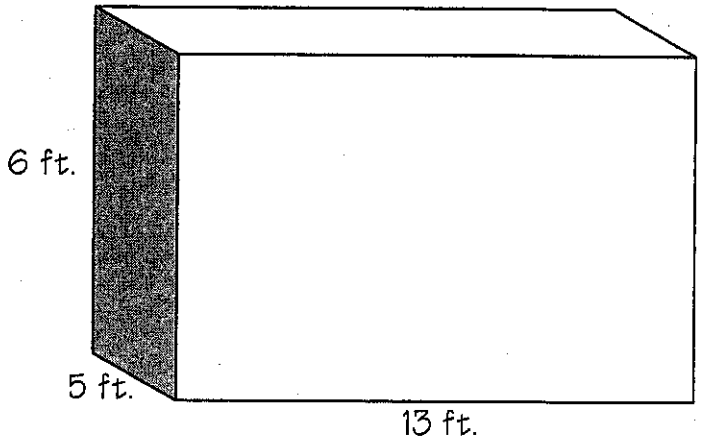
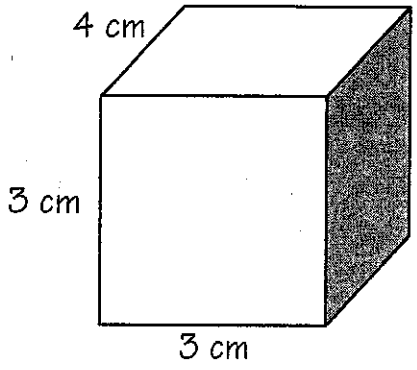


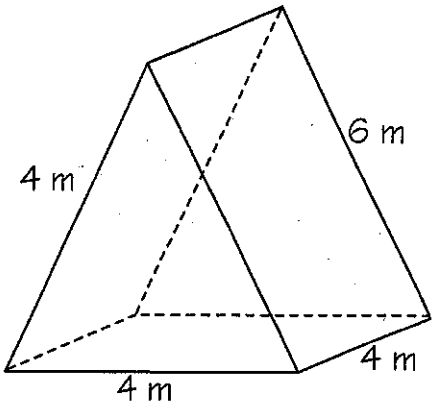
Play on Words: "What happened when Bob left the birdcage open?"

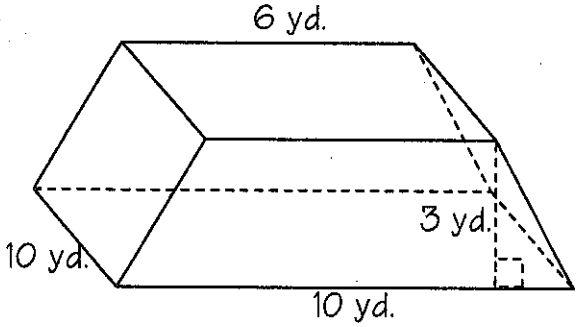
Find the volume. Round your answers to the nearest tenth. Cross out the letters that match your answers. The remaining letters will allow you to figure out the joke.

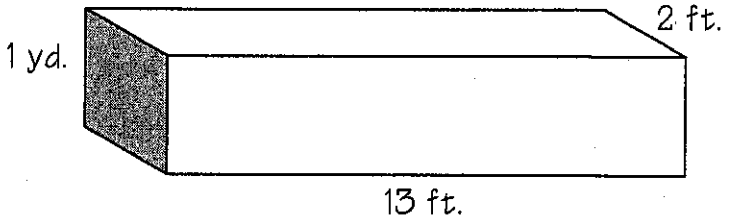












I	B	P	A	O	L	N	Y	G	E	O	N	T
120	240	27	27.7	210.3	480	78	81.5	244	36	72	200	390

ANSWER: _____

(2)

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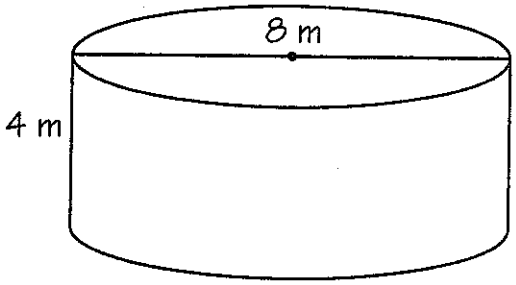
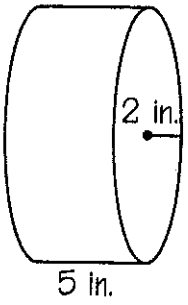
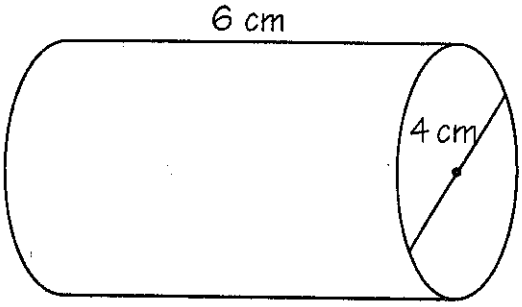
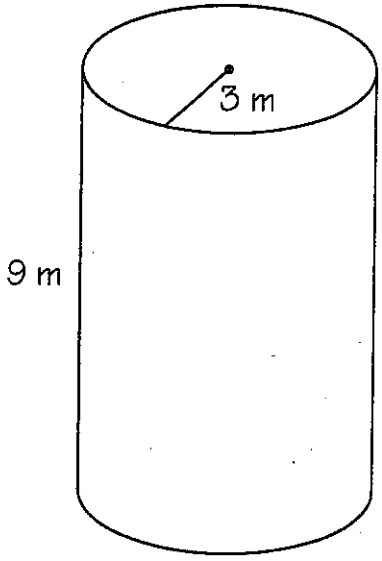
Play on Words: "What the acorn is to the oak."

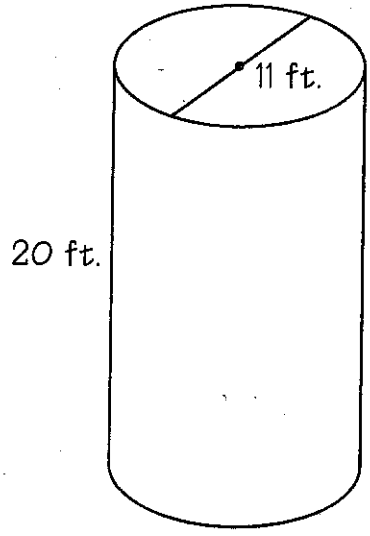
Find the volume and keep your answers in exact terms with pi as part of your answer. Cross out the letters that match your answers. The remaining letters will allow you to figure out the joke.

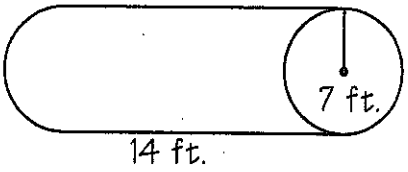












T	H	R	O	N	E	A	W	S	U	O	N	Y
27π	686π	16π	64π	605π	10π	9π	20π	625π	81π	40π	125π	24π

ANSWER: _____

Geo Joke Worksheets © 2002 NASCO

11-6

NAME _____ DATE _____

Practice

Student Edition
Pages 615–620

Volume of Pyramids and Cones

Find the volume of each pyramid. Round to the nearest tenth.

1. The base has an area of 84.3 square centimeters, and the height is 16.4 centimeters

2. The base has an area of 17 square feet, and the height is 3 feet.

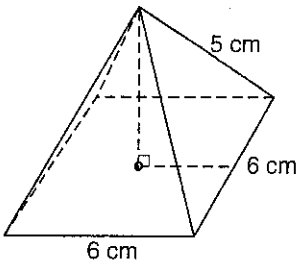
Find the volume of each cone. Round to the nearest tenth.

3. The base has a radius of 16 centimeters, and the height is 12 centimeters

4. The base has a diameter of 24 meters, and the height is 15.3 meters

Find the volume of each solid. Round to the nearest tenth.

5.



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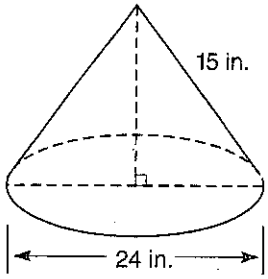

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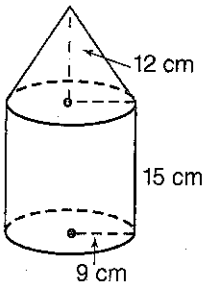

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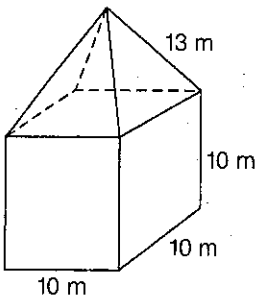


(4)

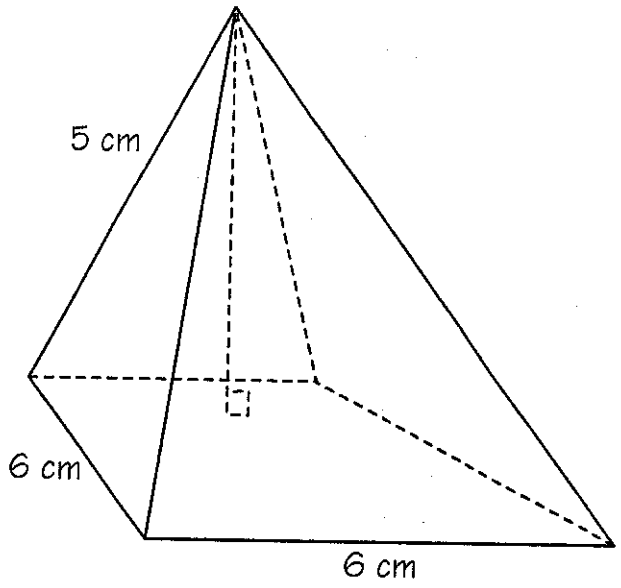
What country makes you shiver?

Find both the volume and surface area. Round your answers to the nearest hundredth. Cross out the letters that match your answers. The remaining letters will allow you to figure out the joke.

The diagram is a right square pyramid.

V = _____

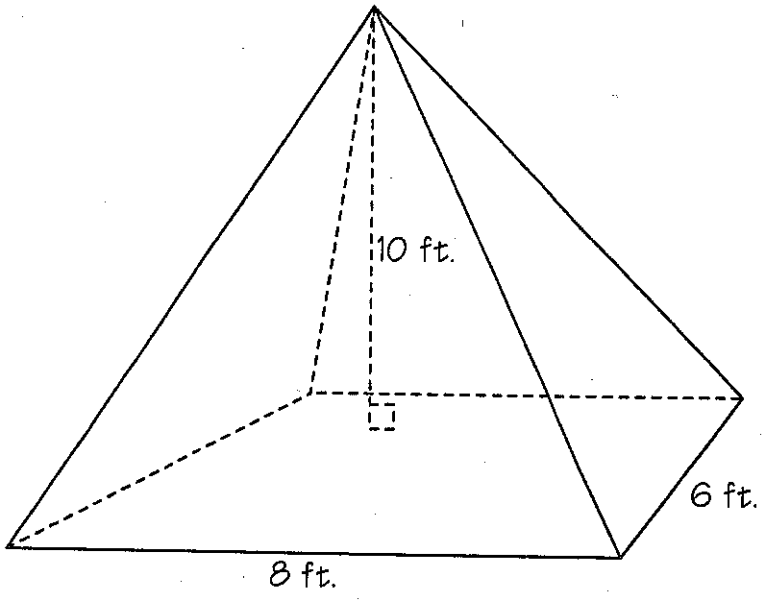
S.A. = _____



The diagram is a right rectangular pyramid.

V = _____

S.A. = _____



I	C	H	A	E	I	L	A	E
196.14	85.34	75.25	84	160	125.5	86.4	31.75	45.94

ANSWER: _____

(5)

NAME _____ DATE _____

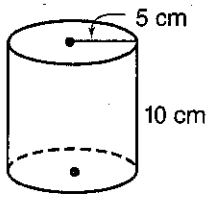
Practice

Student Edition
Pages 591–598

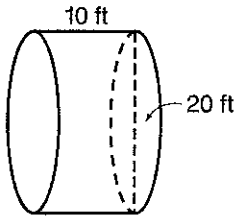
Surface Area of Prisms and Cylinders

Use the right cylinders shown to answer each of the following. Express all answers in terms of π.

1. Find the circumference of the base.
2. Find the lateral area.
3. Find the area of a base.
4. Find the surface area.

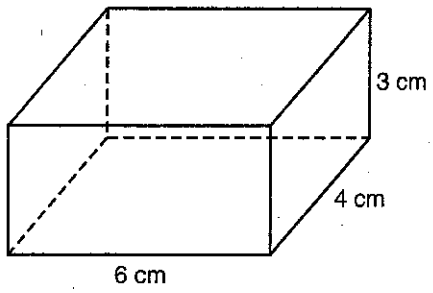


5. Find the circumference of the base.
6. Find the lateral area.
7. Find the area of a base.
8. Find the surface area.



Find the lateral area and the surface area of each right prism. Round to the nearest tenth.

9.



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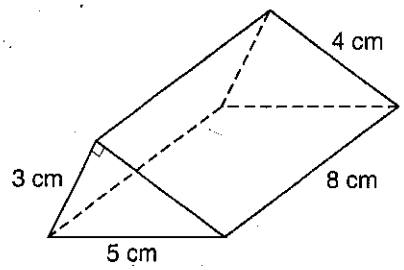

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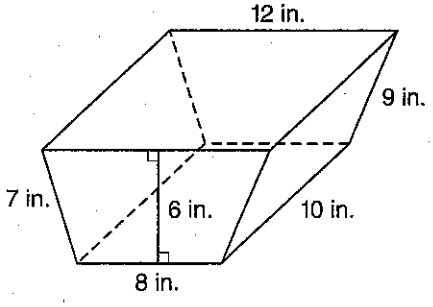

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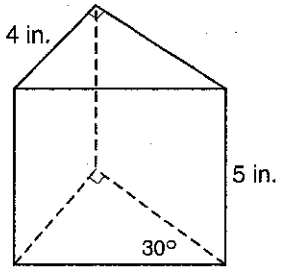

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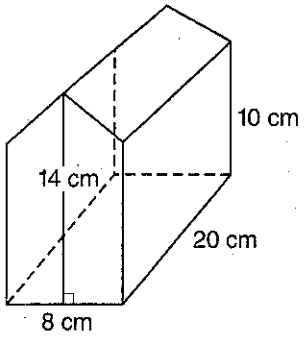

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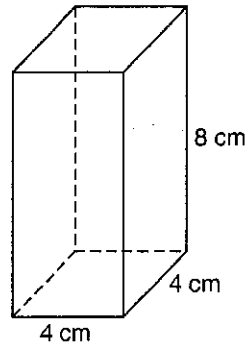

6

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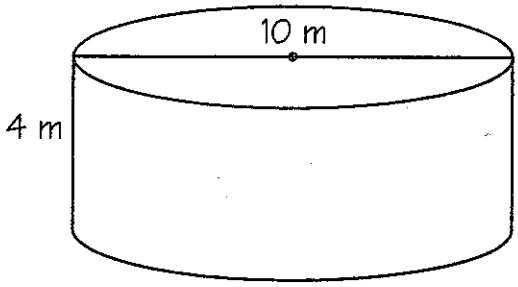
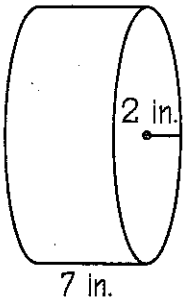
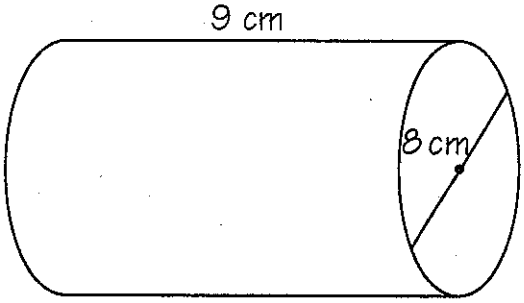
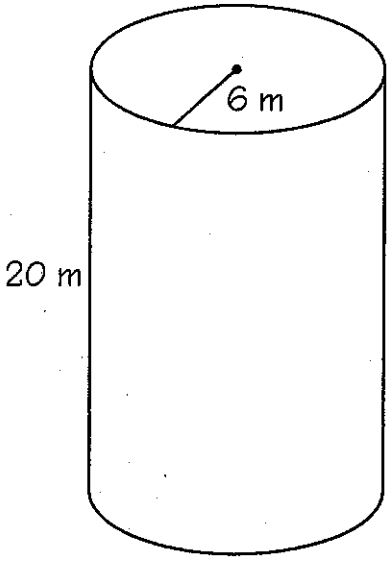
Play on Words: "What do you call two physicians?"

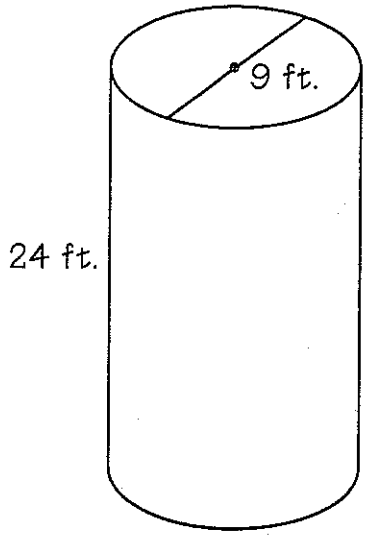
Find the surface area. Round your answers to the nearest tenth with pi as part of your answer. Cross out the letters that match your answers. The remaining letters will allow you to figure out the joke.

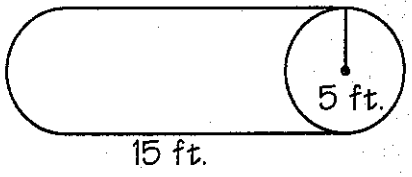












S	P	A	C	E	R	A	M	D	O	Y	X	N
312π	50.5π	24π	104π	200π	125.5π	120π	256.5π	18π	100π	90π	81π	36π

ANSWER: _____

7

NAME _____ DATE _____

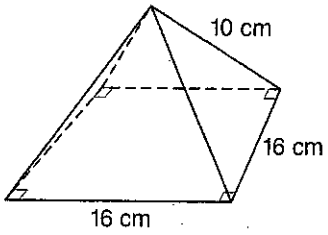
Practice

Student Edition
Pages 599–606

Surface Area of Pyramids and Cones

Find the lateral area of each regular pyramid or right cone. Round to the nearest tenth.

1.



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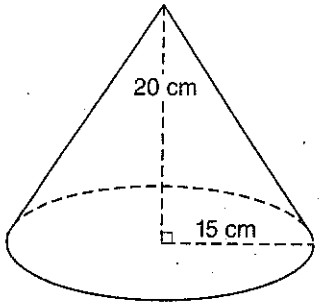

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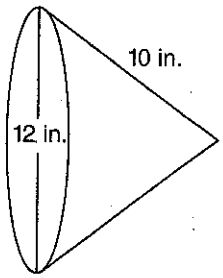

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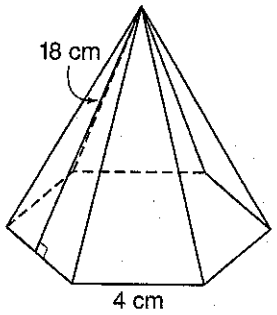
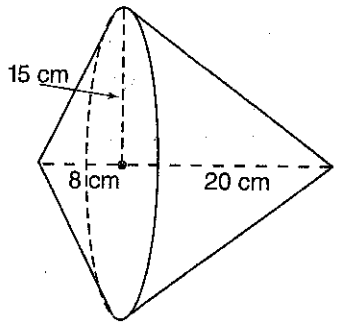


Find the surface area of each solid. Round to the nearest tenth.

5.



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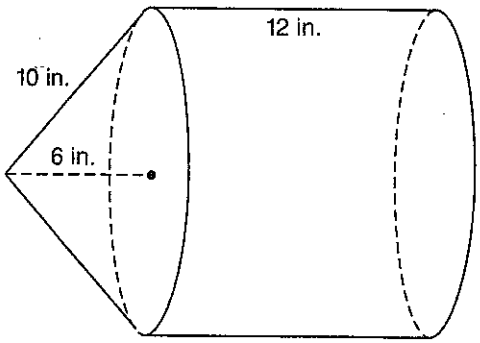

8

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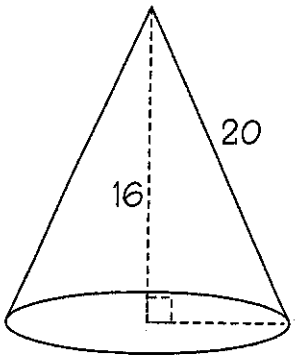
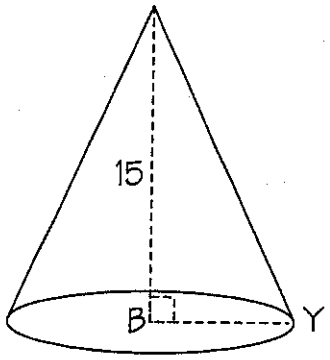
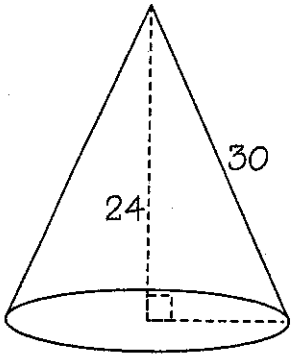
Play on Words: "What piece of clothing would stop Aunt Bertha from looking so ugly?"

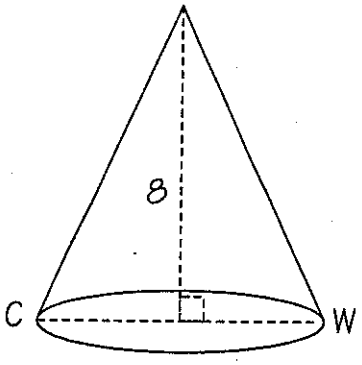
Find the surface area. Round your final answers to the nearest tenth with pi as part of your answer. Cross out the letters that match your answers. The remaining letters will allow you to figure out the joke.



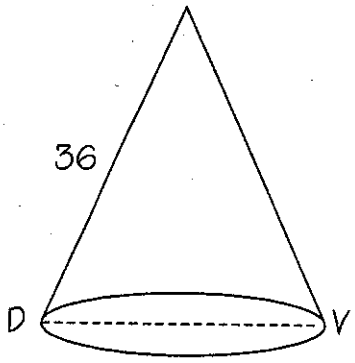


BY = 8

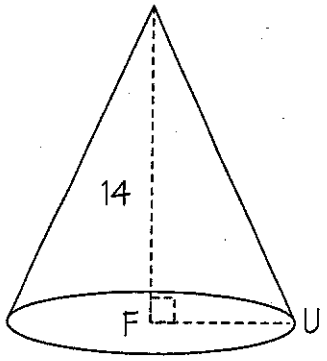




CW = 8



DV = 24



FU = 9

A	S	E	V	T	A	O	M	I	L	N
104.5π	51.8π	576π	678π	230.8π	302.7π	384π	864π	746π	94.3π	200π

ANSWER: _____

9

Geo Joke Worksheets © 2002 NASCO

NAME _____ DATE _____

Practice

Student Edition
Pages 621–628

Surface Area and Volume of Spheres

Find the surface area and volume of each sphere described below. Round to the nearest tenth.

1. The diameter is 100 centimeters.

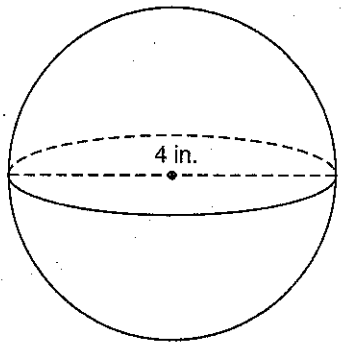
2. A great circle has a circumference 83.92 meters.

3. The radius is 12 inches long.

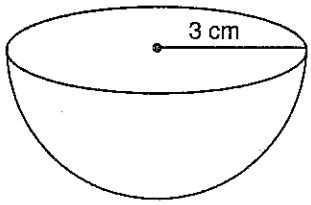
4. A great circle has an area of 70.58 square feet.

Find the surface area and volume of each solid. Round to the nearest tenth.

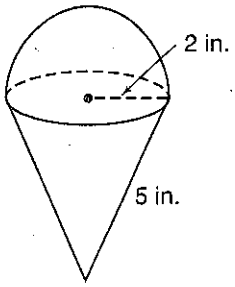
5.



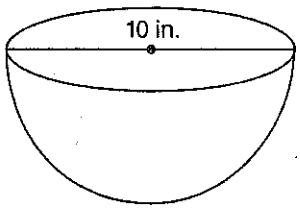
6.



7.



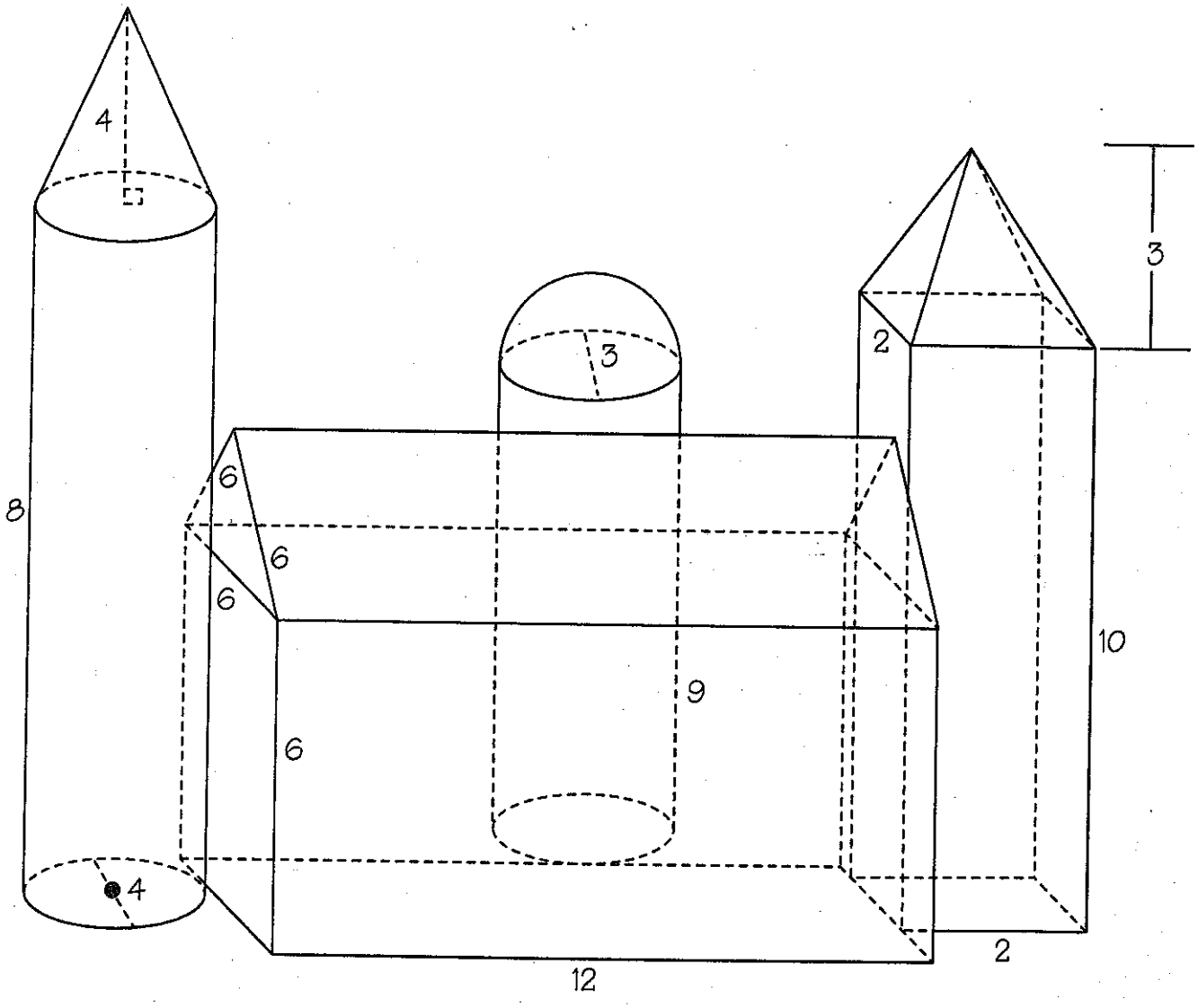
8.



10

What is the volume of the castle?

Find the volume. Round your answer to the nearest hundredth.



$V =$ _____

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